

SUPPORT FOR THE AMENDMENTS

Claim 1 has been amended to include the subject matter of Claim 3. Claim 4 has been amended to depend from Claim 1. Claims 3, 12 and 20 have been cancelled. No new matter is believed to have been added to the present application by the amendments submitted above.

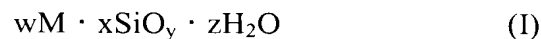
REMARKS

Claims 1-2, 4-11 and 13-19 are now pending. Favorable reconsideration is respectfully requested.

Applicants would like to thank Examiner Wyrozebski-Lee for the helpful and courteous discussion held with their representative on April 28, 2008. During the discussion, amendments and arguments to overcome the outstanding rejections were discussed. The following remarks expand on the discussion with the Examiner.

The present invention relates to a process for producing a diene-based rubber-inorganic compound composite comprising a diene-based rubber and an inorganic compound represented by the following general formula (I), comprising

a step of mixing an inorganic compound and/or a material capable of forming said inorganic compound, a compound having a carbonyl group and a dispersion liquid of a diene-based rubber:



wherein M is at least one metal element selected from the group consisting of Al, Mg, Ti and Ca, metal oxide thereof or metal hydroxide thereof, and w, x, y, and z are an integer of from 1 to 5, an integer of from 0 to 10, an integer of from 2 to 5, and an integer of from 0 to 10, respectively.

See Claim 1.

The rejection of Claims 1-10 under 35 U.S.C. §102(a) over Kondo is respectfully traversed. Kondo fails to disclose the claimed process. Kondo fails to disclose the claimed process.

The claimed process specifies, *inter alia*, mixing the inorganic compound and/or a material capable of forming the inorganic compound, a compound having a carbonyl group and a dispersion liquid of a diene-based rubber. See Claim 1.

In contrast, Kondo fails to disclose mixing the inorganic compound and/or a material capable of forming the inorganic compound, a compound having a carbonyl group and a dispersion liquid of a diene-based rubber, as claimed. In Kondo, an inorganic filler and a diene-based rubber are mixed.

Kondo does use a surfactant in an emulsion polymerization to prepare the polymer, but the surfactant is not used when the inorganic filler and the diene-based rubber are mixed.

In view of the foregoing, Kondo fails to disclose the claimed process. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §102(e) over Konno is respectfully traversed. Konno fails to disclose the claimed process.

Konno disclose mixing an inorganic agent and a diene-based rubber. There is no description of mixing a compound having a carbonyl group with an inorganic compound and/or a material capable of forming the inorganic compound and a dispersion liquid of a diene-based rubber, as claimed.

Regarding Claims 13-19, the reference states that the pH is preferably in the range of 8.5 to 11 or 2 to 4. See paragraph 69 of the reference. There is no suggestion to prepare an aluminum-containing suspension whose pH is controlled in a range between 5.1 and 8.4, as

claimed. In fact, the experimental data presented in the specification demonstrate that using a pH of 7 provides better properties as compared to the use of a pH of 4. See Examples 186-192 of the present application.

In view of the foregoing, Konno fails to disclose the claimed process. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The rejections of the claims under 35 U.S.C. §102(a) or §103(a) over Gorl as evidenced by Thibon is respectfully traversed. Gorl fails to disclose or suggest the claimed process.

Since Claim 3 was not rejected under 35 U.S.C. §102(a) and the subject matter has been incorporated into Claim 1, Claim 1 is not anticipated by the reference.

Gorl also fails to disclose the use of the inorganic compound represented by formula (I) as specified in Claim 1. Rather, the reference describes the use of a filler having a surface modified with an organosilicon compound. Nor is there any suggestion in the reference to use the specified the inorganic compound represented by formula (I).

In view of the foregoing, the claimed process is neither disclosed nor suggested by Gorl. Accordingly, withdrawal of these grounds of rejection is respectfully requested.

The rejection of the claims under 35 U.S.C. §103(a) over Gorl in view of Tsuji is respectfully traversed.

As discussed above, Gorl fails to disclose the use of a compound having an carbonyl group and the inorganic compound represented by formula (I) as specified in Claim 1. Tsuji fails to remedy those deficiencies of Gorl.

Regarding Claims 13-19, those claims specify aluminum hydroxide. In contrast, Gorl describes a filler whose surface is modified with an organosilicon compound. Tsuji fails to remedy that deficiency of Gorl.

In view of the foregoing, the claimed process is not obvious over Gorl in view of Tsuji. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The obviousness-type double patenting rejection of Claims 12 and 20 over the claims of U.S. patent No. 6,727,307 is obviated by the cancellation of those claims. Accordingly, withdrawal of this ground of rejection is respectfully requested.

The obviousness-type double patenting rejection of Claims 1-20 over the claims of U.S. application serial No. 10/129,330 (the '330 application) is respectfully traversed.

Konno disclose mixing an inorganic agent and a diene-based rubber. There is no description of mixing a compound having a carbonyl group with an inorganic compound and/or a material capable of forming the inorganic compound and a dispersion liquid of a diene-based rubber, as claimed.

Regarding Claims 13-19, the reference states that the pH is preferably in the range of 8.5 to 11 or 2 to 4. See paragraph 69 of the reference. There is no suggestion to prepare an aluminum-containing suspension whose pH is controlled in a range between 5.1 and 8.4, as claimed. In fact, the experimental data presented in the specification demonstrate that using a pH of 7 provides better properties as compared to the use of a pH of 4. See Examples 186-192 of the present application.

In view of the foregoing, withdrawal of this ground of rejection is respectfully requested.

The objection to the amendment to the specification filed on March 30, 2005 under 35 U.S.C. §132(a) on the basis of new matter is respectfully traversed. The amendment is supported by page 13, line 22, which explicitly recites “N,N-di-substituted aminoalkyl acrylates.” Accordingly, withdrawal of this objection is respectfully requested.

Applicants submit that the present application is in condition for allowance. Early notice to this effect is earnestly solicited.

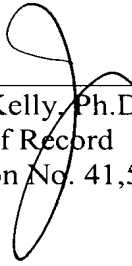
Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)



James J. Kelly, Ph.D.
Attorney of Record
Registration No. 41,504